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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,122	04/09/2001	Gary M. Katz	PIP-69B-KATZ	5972
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NEIFELD IP LAW, PC 4813-B EISENHOWER AVENUE ALEXANDRIA, VA 22304			RETTA, YEHDEGA	
			ART UNIT	PAPER NUMBER
			3622	

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/828,122	KATZ, GARY M.	
	Examiner	Art Unit	
	Yehdega Retta	3622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10 May 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-58 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-58 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION

This office action is in response to Appeal Brief filed May 10, 2005. Claims 1-58 are still pending.

Response to Amendment

In view of the Appeal Brief filed on May 10, 2005, PROSECUTION IS HEREBY REOPENED. New ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Objections

Claim 27 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The test for a proper dependent claim is whether the dependent claim includes every limitation of the parent claim. The test is not whether the claims differ in scope. A proper dependent claim shall not conceivably be infringed by anything, which would not also infringe

the basic claim. If independent claim recites a method of making a specified product, a claim to the product set forth in the independent claim would not be a proper dependent claim since it is conceivable that the product claim can be infringed without infringing the base method claim if the product can be made by a method other than that recited in the base method claim. Therefore, claim 27 is improper dependent claims.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-9, 26, 28, 35-40 and 53-56 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological art; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the “progress of science and the useful arts” (i.e., the physical science as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For the process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts". Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In Toma, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673

(1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter ... is statutory, not on whether the product of the claimed subject matter ... is statutory, not on whether the prior art which the claimed subject matter purports to replace ... is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of

an abstract idea. Indeed, *State Street* abolished the Free man-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. In the *Bowman* decision, the Board acknowledged that the dichotomy of the analysis of the claims under 35 U.S.C. 101, thereby emphasizing the fact that not only must the claimed invention produce a "useful, concrete and tangible result" but that it must also be limited to the technological arts in order to be deemed statutory under the guidelines of 35 U.S.C. 101 the See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, the independently claimed steps of receiving identification information and determining purchase history or demographic characteristics or promotional usage and pairing the promotions do not require structural interaction or mechanical intervention such that the invention falls within the technological arts permitting statutory patent protection. The claimed step of receiving, determining and pairing does not apply, involve, use or advance the technological arts since all of the recited steps can be performed in the mind of user or by use of a pencil and paper. Claims reciting those steps can be performed by interpersonal communications such that the claimed steps can be performed without a physical structure or mechanical object. The method only constitutes an idea for determining an offer.

Additionally, for a claimed invention to be statutory the claimed invention must produce a useful, concrete and tangible result. In the present case, the claimed invention produces promotion (i.e., repeatable) selection of second promotion (i.e., useful and tangible). Although the recited process produces a useful, concrete and tangible result, since claimed invention, as a whole, is not with the technological art as explained above, the claims are deemed to be directed to non-statutory matter.

However in order to examine the claimed invention in light of the prior art, further rejections will be made on the assumption that those claims are statutorily permitted.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-3, 20, 21, 26-30, 33 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Aggarwal et al. U.S. Patent No. 6,349,309.

Regarding claims 1, 20, 21 and 27 Aggarwal teaches receiving identification from a customer (transaction or purchases) determining a category purchase history of the consumer (col. 10 lines 65 to col. 11 lines 15); selecting promotion determined to be more relevant based upon the identification information and purchase history; paring the low relevance and second relevance promotion (see col. 11 lines 29-46).

Regarding claims 2 and 3, Aggarwal teaches purchase history including frequency of purchases in a product or a number of purchases in a product category (see col. 11 line 1-15).

Regarding claims 26 and 27, Aggarwal teaches receiving promotional information regarding one promotion paring promotions with low relevance promotions with other promotions providing the paired promotions to the customer. Aggarwal teaches providing promotional list sorted according to for example frequency of purchase reported to user in order of frequency of purchase, i.e., with lower frequency of purchase listed under the ones with higher frequency of purchase (see col. 11 lines 7-46).

Regarding claims 28, 29 Aggarwal teaches determining a purchase history of the consumer (col. 10 lines 65 to col. 11 lines 15); selecting a promotion determined to be more relevant based upon the purchase history; paring the low relevance and second relevance promotion; providing the paired promotion to customer; outputting the data (see col. 11 lines 29-46).

Regarding claims 30, 33, 34, Aggarwal teaches the steps are computer implemented (see col. 10 lines 24-54).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-19, 22-25, 27, 31, 32, 36-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aggarwal et al. U.S. Patent No. 6,349,309, and further in view of Hertz et al. (US 6571279).

Regarding claims 4, 5, 22 and 23, Aggarwal teaches receiving identification from a customer (transaction or purchases) determining a product usage history (col. 10 lines 65 to col. 11 lines 15); selecting promotion determined to be more relevant based upon the identification information and purchase history; paring the low relevance and second relevance promotion (see col. 11 lines 29-46). Aggarwal teaches information about a customer's purchase behavior including a list of items purchased, the price of the items, the frequency of purchase and other information relating to an item for sale or describing the customer (see col. 11 lines 7-15). Aggarwal does not explicitly teach determining a promotional usage denominator. Hertz teaches retailer extract and model patterns of customer shopping behavior for designing optimal sales promotions. Hertz teaches storing information about the number and types of item purchased at different dates and times, customers price sensitivities and coupon usage and determining promotions (different sales at different price for different customers) based on the coupon usage. Hertz also teaches the history and relative effect of the coupons that have already been generated

for the item for purchase being stored (see col. 22 lines 26-67 and col. 23 lines 1-9, 43-63). It would have been obvious to one of ordinary skills in the art at the time of the invention to modify Aggarwal's purchase behavior data to include the coupon usage data of a customer in order to provide shoppers with coupons and promotions specifically tailored to their preferences, as taught by Hertz (see col. 23 lines 52-64). One would be motivated to consider the usage of the items in the promotion list of Aggarwal as part of the frequency purchases in order to customize the offer as taught in Hertz.

Regarding claims 6, Aggarwal does not teach promotional usage relates to a location of where promotions are exercised. Official notice is taken that old and well known to record the location of where coupons or discounts are redeemed or used as part of the transaction history or profile. It would have been obvious to one of ordinary skill in the art at the time of the invention to include such information in the Aggarwal's customer's transaction database. One would be motivated to use the information and identify each locations of a chain stores, if more than one location is provided, to provide the promotional list of Aggarwal at specific location, if the consumer frequents that specific location.

Regarding claims 7-18, 24, 25 and 27, Aggarwal teaches receiving identification from a customer (transaction or purchases) determining a product usage history of the consumer (col. 10 lines 65 to col. 11 lines 15); selecting promotion determined to be more relevant based upon the identification information and purchase history; paring the low relevance and second relevance promotion (see col. 11 lines 29-46). Aggarwal teaches information about a customer's purchase behavior including a list of items purchased, the price of the items, the frequency of purchase and other information relating to an item for sale or describing the customer (see col. 11 lines 7-15).

Aggarwal does not explicitly teach determining a demographic characteristic; comprises of pet owner or parenthood. Hertz teaches storing purchase history including demographic characteristics (customers with school-age children or pet owners) and determining appropriate coupons which are most appropriate for the shopper (see col. 23 lines 1-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Aggarwal's transaction database to determine the demographic characteristics of shoppers since Aggarwal consider each item purchased. One would be motivated to consider the customer's demographic characteristics, in the promotion list of Aggarwal, as part of the frequency purchases for the purpose of determining which coupons or promotions are most appropriate to the shopper, as taught by Hertz (see col. 23 line 60 to col. 24 line 14). Since Aggarwal stores transaction history of every item purchased, whether the promotion is for goods from the same or different promoter, whether the product is new to the store or customer would not make a difference to Aggarwal's promotional list. Those limitations are non-functional descriptive material. However, Hertz teaches recording information about product's size, shape, packaging and advertisement or anything that might impact its appeal to customers. Therefore, it would have been obvious to one ordinary skill in the art the time of the invention to include such information in order to provide shopper with coupons or promotions specifically tailored to their preference as taught by Hertz (see col. 23 lines 1-67 and col. 24 lines 9-51).

Regarding claim 19, Aggarwal teaches providing a promotional list with more than two items (see col. 11 lines 29-53).

Regarding claims 31, 32, Aggarwal teaches the steps are computer implemented (see col. 10 lines 24-54).

Regarding claims 36-58, Aggarwal teaches reporting to the customer the promotional list, but failed to explicitly indicate displaying or exercising the promotion. Hertz teaches displaying promotional message and printing the coupons for customers who can use them for the day's shopping trip. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to display Aggarwal's promotional list that is reported to customer and to allow user to exercise the coupon in order to motivate the customer to buy the product being promoted (see col. 24 lines 5-14).

Response to Arguments

Applicant's arguments with respect to claims 1-58 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yehdega Retta whose telephone number is (571) 272-6723. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yehdega Retta
RETTA YEHDEGA
PRIMARY EXAMINER

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